

### INDUSTRIAL HYGIENE EQUIPMENT PROCEDURE

## **Use of 3M Organic Vapor Badges**

9/92

# **Objective**

This procedure is a guide to the sampling of organic vapors with the 3M 3500 Organic Vapor Monitor.

#### **Equipment**

- 1. 3M Organic Vapor Badge
- 2. IH Sampling Notes Form

# **Procedure**

- 1. Check the attached list to assure that the organic vapor(s) of interest can be measured using the 3M 3500 Organic Vapor Monitor.
  - \*NOTE If measuring complex petroleum distillates such as stoddard solvent, the lab needs a bulk sample of the material to do the analysis. If it is not possible to get a bulk sample (i.e. paint), ask for an analysis of "Rest As Hexane". The lab will add all of the peaks from the gas chromatograph and compare this to a hexane standard. This is not an analysis for hexane. This is a mixture of solvents. Use the TLV for stoddard solvent.
  - \*NOTE The precision of the analysis decreases when you ask for an analysis of many solvents. Prioritize what you want. Ask for three at most. Group the rest and ask for "rest as hexane".
- 2. Explain to the employee who will be wearing the equipment the purpose of sampling. Let him/her know that they will receive a copy of the results.
- 3. Open the can by pulling the ring tab. Remove the monitor. Record the time on the IH form.

- 4. Take detailed notes concerning work practices, possible interferences, different employee tasks and sources of exposure, use of local exhaust ventilation, and personal protective equipment used. Note any suggestions that can be used to reduce exposure.
- 5. Attach the monitor as near to the employee's breathing zone as possible. DO NOT REMOVE THE WHITE FILM AND PLASTIC RING.
- 6. When the sampling period is over, remove the plastic ring and white film, snap the closure cap onto the monitor body. Seat the two port plugs. Record ending sampling time.
- 7. Record the sample number (see IH Notes Preparation Procedure) on the monitor.
- 8. Obtain a blank sample. At the monitoring site, remove an unused monitor from the aluminum can. Remove the plastic ring and white film and seal the monitor with the closure cap. Mark the sample with the word BLANK.
- 9. Submit samples, blank, and paperwork to the ES&H Section for processing.